

Listing of Claims

After entering the present amendment, claims 1-3, 5-12, 14 and 18-21 are currently pending in the present patent application. Claims 4, 13 and 15-17 have been previously cancelled without prejudice. Please amend claims 1-2, 6, 12 and 19 as follows.

1. (currently amended) A deliverer for a sheeter, the deliverer comprising:

a first set of vacuum belts, each belt within the first set having a pair of ends with a pulley at each end, and a plurality of apertures defined along the belts, and a vacuum chamber disposed below top surfaces of the first set of vacuum belts, structured to provide a suction through the apertures;

a vacuum roller disposed adjacent to one end of the first set of vacuum belts and substantially parallel to the pulleys of the first set of vacuum belts, the vacuum roller defining a pair of ends, a hollow interior, and at least one row of apertures, each row of apertures extending axially down a length of the vacuum roller, the vacuum roller further comprising a vacuum fitting in communication with the hollow interior;

a second set of vacuum belts disposed adjacent to the vacuum roller and coplanar with the first set of vacuum belts, each belt within the second set having a pair of ends with a pulley at each end, and a plurality of apertures defined along the belts; and

a rippler disposed between at least some of the first set of vacuum belts, the rippler defining a ridge structured to cause a paper passing over the rippler to develop a ripple substantially parallel to a direction of movement within the deliverer,

wherein the rippler is an elongated member having a hook for securing the rippler to a top plate of the deliverer.

2. (currently amended) The deliverer according to claim 1, wherein the top plate is located below the first set of vacuum belts, and

wherein the a vacuum chamber is defined by the top plate, a bottom plate, a plurality of end plates and a plurality of side plates.

3. (previously presented) The deliverer according to claim 1, wherein the rippler defines a pair of ends, with the hook disposed on one end, and the ridge disposed on the opposite end.

4. (cancelled)

5. (original) The deliverer according to claim 1, wherein the vacuum roller includes four rows of holes.

6. (currently amended) The deliverer according to claim 1, wherein the vacuum roller further comprises:

an outer rotating portion and an inner stationary portion,

wherein the outer rotating portion defines the at least one row of apertures, ~~each row of apertures extending axially down the length of the vacuum roller,~~

wherein the inner stationary portion defines the hollow interior and includes a row of apertures provided therein, and

wherein the a row of apertures of the inner stationary portion extend axially down the length of the vacuum roller, with each of the apertures of the inner stationary portion corresponding to one aperture within each row of apertures defined within the outer rotating portion.

7. (previously presented) The deliverer according to claim 1, wherein a drive means for rotating an outer roller portion of the vacuum roller is provided.

8. (original) The deliverer according to claim 6, wherein the inner stationary portion further comprises an insert within each of the apertures defined therein, the insert defining a hole therein, and being biased outward by a spring.

9. (original) The deliverer according to claim 8, wherein each of the inserts is made from graphite.

10. (original) The deliverer according to claim 6, further comprising an adjustment knob on the inner stationary portion.

11. (previously presented)The deliverer according to claim 6, wherein the vacuum fitting is secured at one end of the inner stationary portion.

12. (currently amended) A rippler for a paper deliverer having a top plate, the rippler comprising:

a ridge structured to cause a paper passing over the rippler to develop a ripple substantially parallel to a direction of movement within the deliverer,

wherein the rippler is an elongated member having a hook that is structured to secure for securing the rippler to the top plate of the deliverer with the hook located proximate to a pulley of the deliverer.

wherein the rippler is structured to be disposed between at least some of a set of vacuum belts, and

wherein the ripple in the paper is structured to increase the rigidity of the paper and resist being bent upward.

13. (cancelled)

14. (previously presented)The rippler according to claim 12, wherein the rippler defines a pair of ends, with the hook disposed on one end, and the ridge disposed on the opposite end.

15. (cancelled)

16. (cancelled)

17. (cancelled)

18. (previously presented)The rippler according to claim 12, wherein the deliverer further comprises:

a first set of vacuum belts, each belt within the first set having a pair of ends with a pulley at each end, and a plurality of apertures defined along the belts, and a vacuum chamber disposed below top surfaces of the first set of vacuum belts, structured to provide a suction through the apertures;

a vacuum roller disposed adjacent to one end of the first set of vacuum belts and substantially parallel to the pulleys of the first set of vacuum belts, the vacuum roller defining a pair of ends, a hollow interior, and at least one row of apertures, each row of apertures extending axially down a length of the vacuum roller, the vacuum roller further comprising a vacuum fitting in communication with the hollow interior; and

a second set of vacuum belts disposed adjacent to the vacuum roller and coplanar with the first set of vacuum belts, each belt within the second set having a pair of ends with a pulley at each end, and a plurality of apertures defined along the belts.

19. (currently amended) The rippler according to claim 18, wherein the vacuum roller further comprises:

an outer rotating portion and an inner stationary portion,

wherein the outer rotating portion defines the at least one row of apertures, ~~each row of apertures extending axially down the length of the vacuum roller,~~

wherein the inner stationary portion defines the hollow interior and includes a row of apertures provided therein, and

wherein the a row of apertures of the inner stationary portion extend axially down the length of the vacuum roller, with each of the apertures of the inner stationary portion corresponding to one aperture within each row of apertures defined within the outer rotating portion.

20. (previously presented)The rippler according to claim 18, wherein the vacuum roller includes four rows of holes.

21. (previously presented)The rippler according to claim 19, wherein the inner stationary portion further comprises an insert within each of the apertures defined therein, the insert defining a hole therein, and being biased outward by a spring.